



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------|----------------------|--------------------------|------------------|
| 09/801,485 | 03/08/2001 | Erin B. Dickerson | WARF-0003 | 4744 |
| 26259 | 7590 | 06/28/2004 | EXAMINER | |
| LICATLA & TYRRELL P.C. | | | SEHARASEYON, JEGATHEESAN | |
| 66 E. MAIN STREET | | | ART UNIT | PAPER NUMBER |
| MARLTON, NJ 08053 | | | 1647 | |

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------|--|---|--|
| Advisory Action | Application No. 09/801,485 | Applicant(s) DICKERSON ET AL. | |
| | Examiner Jegatheesan Seharaseyon | Art Unit 1647 | |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.

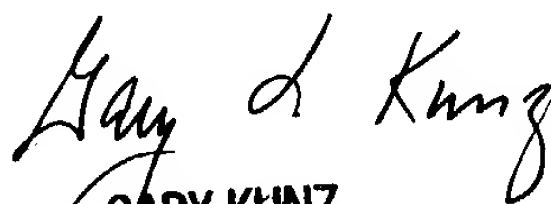
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.

10. ☒ Other: See Continuation Sheet

Continuation of 10. Other: Applicants remarks have been fully considered but are deemed not persuasive for reasons already of record in Office Actions dated 8/11/2003 and 2/17/2004.

Applicant is correct in stating that Anderson reference does not teach the fusion between IL-12 and B7. The Office never stated that the fusion was between B7 and IL-12 (see previous actions dated 8/11/2003 and 2/17/2004). The Office did not indicate that Anderson teaches an IL-12 fusion protein with B7 (see page 2, paragraph 3 of the Office Action dated 2/17/2004). However, Anderson et al. does describe a fusion protein which comprises a p35 subunit and a p40 subunit of IL-12 which are linked by a linker polypeptide meeting the definition of a fusion protein (see page 3, paragraph 3a of the Office Action dated 8/11/2003). Therefore, the position of B7 in the expression construct is irrelevant. Although, there is no reference to teach the fusion between B7 and p35 or p40, as indicated previously the fusion protein is generated by linking p35 and p40 subunits which inturn express a functional IL-12 protein.

Further, the reference of Rouslahti et al. teaches the targeting of a therapeutic agent conjugated to RGD peptide (homing peptide) for the treatment of tumor. Since IL-12 has been demonstrated to contain potent anti-tumor effects, a person skilled in the art would have been motivated to target tumor blood vessels which selectively express integrins using the RGD motif with a reasonable expectation of success. Therefore, the instant invention is rejected as obvious over Anderson et al. in view of Rouslahti et al.


GARY KUNZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600